

CLAIMS

1. A composition obtained by drying a suspension containing, on the one hand, mineral or organic particles A having a form factor of less than 15 and, on the other hand, mineral or organic particles B dispersible in a polymer medium.

2. The composition as claimed in claim 1, characterized in that said suspension results from mixing at least one suspension of mineral or organic particles A having a form factor of less than 15 with at least one suspension of organic or mineral particles B dispersible in a polymer medium.

3. The composition as claimed in either of claims 1 and 2, characterized in that the mineral or organic particles A having a form factor of less than 15 are not dispersible in a polymer medium.

4. The composition as claimed in one of claims 1 to 3, characterized in that said drying is carried out by spray drying.

5. The composition as claimed in claim 4, characterized in that the outlet temperature of the atomizer employed during the drying is less than 170°C, preferably less than 140°C.

6. The composition as claimed in either of claims 4 and 5, characterized in that the drying is carried out by means of a nozzle atomizer.

7. The composition as claimed in one of claims 1 to 6, characterized in that said particles B are precipitated silica particles dispersible in a polymer medium.

8. The composition as claimed in one of claims 1 to 7, characterized in that said particles B are precipitated silica particles having a pore distribution such that the pore volume formed by the pores whose diameter is between 175 and 275 Å represents at least 50% of the pore volume formed by the pores having diameters of less than or equal to 400 Å.

9. The composition as claimed in one of claims 1 to 7, characterized in that said particles B are precipitated silica particles having an ultrasonic deagglomeration factor (F_D) of greater than 5.5 ml and a median diameter (ϕ_{50}) after ultrasonic deagglomeration of less than 5 μm .

10. The composition as claimed in claim 9, characterized in that said particles B are precipitated silica particles having a pore distribution such that the pore volume formed by the pores whose diameter is between 175 and 275 Å represents at least 50% of the pore volume formed by the pores having diameters of less than or equal to 400 Å.

11. The composition as claimed in one of claims 1 to 10, characterized in that said particles B

are precipitated silica particles having an ultrasonic deagglomeration factor (F_D) of greater than 11 ml and a median diameter (ϕ_{50}) after ultrasonic deagglomeration of less than 2.5 μm .

12. The composition as claimed in one of claims 1 to 11, characterized in that said particles B are precipitated silica particles having a CTAB specific surface area of between 50 and 240 m^2/g , preferably between 100 and 240 m^2/g and in particular between 140 and 240 m^2/g .

13. The composition as claimed in one of claims 1 to 12, characterized in that said particles A are alumino silicate or titanium dioxide particles.

14. The composition as claimed in one of claims 1 to 12, characterized in that said particles A are aluminum or magnesium hydroxycarbonate, hydroxyoxycarbonate or oxycarbonate particles, or hydrotalcite particles.

15. The composition as claimed in one of claims 1 to 12, characterized in that said particles A are alumina particles.

16. The composition as claimed in claim 15, characterized in that the alumina is obtained by autoclaving a suspension of boehmite or pseudo-boehmite, preferably in the presence of at least one acid.

17. The composition as claimed in claim 16,

characterized in that the autoclaving is carried out at a temperature hold of between 110 and 150°C for a time of 6 to 10 hours.

18. The composition as claimed in claim 15, characterized in that the alumina is a crystalline monohydrate, essentially in boehmite form, obtained by coprecipitating sodium aluminate and aluminum sulfate.

19. Use of a composition as claimed in one of claims 1 to 18 as a reinforcing filler in a polymer composition.

20. Use as claimed in claim 19, characterized in that said rubber composition is based on at least one polymer or copolymer having a glass transition temperature of between -150 and +300°C.

21. A polymer composition based on at least one polymer or copolymer, which includes a reinforcing filler, characterized in that said reinforcing filler consists of the composition as claimed in one of claims 1 to 18.

22. The polymer composition as claimed in claim 21, characterized in that said polymer or copolymer has a glass transition temperature of between -150 and +300°C.

23. The polymer composition as claimed in either of claims 21 and 22, characterized in that it furthermore includes at least one coupling agent and/or at least one recovery agent.

24. A finished article based on at least one composition as defined in one of claims 21 to 23.